

REMARKS

Claims 1-5 are pending in the present application. Claims 2 and 3 have been amended herein to address a minor informality. Applicants submit that these amendments to claims 2 and 3 are not narrowing and related to patentability.

I. FILING DATE OF THE PRESENT APPLICATION

Regarding the filing date of the present application, Applicant respectfully requests the Examiner to indicate the correct filing date of **August 26, 2003** in all future papers. Applicant filed a **REQUEST FOR CORRECTION OF THE OFFICIAL FILING RECEIPT** on March 16, 2004. This Request indicated that Original Official Filing Receipt mailed on November 20, 2003 and the Notice to File Missing Parts mailed on November 20, 2003 indicated the correct filing date of **August 26, 2003**. Also, the correct filing date of August 26, 2003 was indicated on the return receipt postcard (Unofficial Filing Receipt) received on September 8, 2003. Copies of these documents were submitted with the Request filed on March 16, 2004.

II. FORMAL MATTERS

Applicant notes with appreciation that the First Office Action acknowledges the claim to priority and indicates that the certified copies of the priority documents have been received.

The First Office Action points out that the PTO Form 1449 submitted in the IDS filed on March 18, 2004 is 10/649,2~~5~~8 instead of 10/649,2~~2~~8. The remaining documents filed with the IDS (postcard, certificate of mailing and IDS) all included the correct serial number. The Examiner indicated that he has assumed that the IDS was intended to be filed in the present application. Applicant confirms that the Examiner's assumption is correct.

The First Office Action indicates that the drawings filed on June 27, 2002 are objected to. The Examiner asserts that Fig. 13 should be designated as Prior Art because only that which is old is illustrated. Applicant submits herewith a Corrected Formal Drawing for Fig. 13 which label Fig. 13 as "Prior Art."

The drawings also are objected to as failing to comply with 37 C.F.R. 1.84(p)(5) because they include reference numeral 271 that is not mentioned in the description. The Corrected Formal Drawing for Fig. 6 submitted herewith deletes reference numeral 271 from Fig. 6.

The Abstract is objected to because it is more than 150 words or more than 25 lines. Applicant submits that the Abstract attached hereto on a separate sheet overcomes this objection.

The disclosure is objected to for minor informalities. Applicant submits that the amendments to the specification presented herein overcome the noted objections.

Claims 2, 3 and 4 are rejected under 35 U.S.C. § 112, first paragraph. Applicant submits that the amendments to the claims 2 and 3 presented herein overcome the noted objections.

III. PRIOR ART REJECTIONS

A. Claims 1 and 2

Claims 1 and 2 are provisionally rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1, 2 and 3 of U.S. Application No. 10/649,578.

Applicant submits herewith a Terminal Disclaimer signed by the attorney of record. Thus, Applicant submits that this rejection is overcome.

B. Claims 1 and 5

Claims 1 and 5 are rejected under 35 U.S.C. § 102 (e)(2) as being anticipated by U.S. Patent No. 6,687,022 (Lapstun). This rejection is traversed.

Relying on column 28, line 19 – column 33, line 41; column 37, lines 9-25; and Figures 19, 26, 29 and 30, the Examiner asserts that Lapstun discloses all of the elements of claims 1 and 5. Applicant submits that Lapstun does not teach or suggest to store liquid ejection data in one side of the buffer areas and transfer liquid ejection data stored in the other side of buffer areas to an external memory, being synchronized with the same operation clock. This minimizes the processing time for both storing and transferring under a certain clock rate.

Therefore, because Lapstun does teach or suggest each feature of claims 1 and 5, the rejection of claims 1 and 5 under 35 U.S.C. § 102(e)(2) is improper and should be withdrawn.

C. Claims 2 and 3

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lapstun in view of www.PCGuide (Kozierok). This rejection is traversed.

The Examiner asserts that Lapstun discloses all of the elements of claims 2 and 3 except for the use of a DMA to transfer data from the output face to the print head or external memory. Regarding claim 2, the Examiner asserts that it would have been obvious to utilize the DMA of Kozierok to eliminate the need for the processor to control the data transferring operation to allow for

increased performance. Regarding claim 3, the Examiner asserts that it would have been obvious to include means for changing the first buffer face from reading to writing and the second buffer face from writing to reading in the environment of claim 2 because Lapstun disclosed that the operation would take place.

Applicant submits that claim 2 recites more than just DMA-transferring. Claim 2 also recites that both an operation of sequentially storing developed data of one word into a first face of the line buffer and an operation of DMA-transferring data already developed in a second face of said buffer areas to external memory one word each are simultaneously performed per one clock synchronizing with an operation clock. Neither Lapstun nor Kozierok discloses this claim feature. Also, Applicant submits that Kozierok fails to make up for the above-noted deficiencies of Lapstun.

Therefore, because the combination of Lapstun and Kozierok does not form the invention defined by claims 2 and 3, the rejection of claims 2 and 3 under 35 U.S.C. § 103(a) is improper and should be withdrawn (see MPEP 2143.03).

D. Claim 4

Claim 4 does not appear to be rejected based on prior art. Therefore, after the rejection of claim 4 under 35 U.S.C. § 112, second paragraph, is

overcome, it appears that claim 4 is allowable. Applicant respectfully requests the Examiner to confirm whether Applicant's understanding is correct.

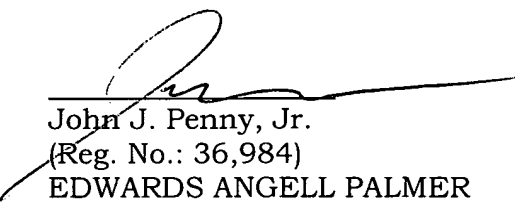
Based on the foregoing, Applicant submits that the present application is in condition for allowance and allowance is respectfully solicited. If the Examiner believes that any of the outstanding issues could be resolved by a telephone conference, Applicant respectfully requests the Examiner to contact the undersigned at the telephone number listed below.

Applicant believes that no additional fees are due for the subject application. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. 04-1105.

Respectfully Submitted,

Date: November 14, 2005

Customer No.: 21874


John J. Penny, Jr.

(Reg. No.: 36,984)

EDWARDS ANGELL PALMER

DODGE, LLP

P.O. Box 55874

Boston, Ma 02205

Tel: (617) 517-5549

Fax: (617) 439-4170